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PATENT P56525RE

### REMARKS

This Amendment is submitted in response to Paper No. 20080211 issued on the 14th of February 2008. Entry of this Paper, re-examination and reconsideration are respectfully requested.

## I. Amendment of the Specification

No amendment to the specification is made by this Paper.

### II. Listing of the Claims

Pursuant to 37 CFR §1.121(c), this listing of the claims, including the text of the claims, will serve to replace all prior versions of the claims, in the application.

## III. Status of the Claims

Upon entry of this Paper, claims 21 through 60 will be pending.

### IV. Amendment of the Claims

Claims 21, 31, 42, 52, 54, 55 and 58 are amended by this paper.

The subject matter being deleted is indicated by a strikeout.

The subject matter being added to claims 21, 31, 42, 52, 54 and 58 is indicated in the following paragraphs of these remarks.

### **DETAILED ACTION**

## Claim Rejection - 35 U.S.C. § 102

Claims 21 through 23, 25, 26, 30 through 34, 36, 37, 41 through 44, 46, 47, 51, 52, 54, 55, 57, 58, 60 are rejected under 35 U.S.C. 102(e) as being anticipated by the newly cited Chhabra (US 5,831,791). Applicant respectfully traverses this rejection for the following reasons.

### Claim 21

In support of this rejection, Paper No. 20080211 states that,

"As per claim 21, Chhabra (US 5,831,791) discloses a negative pressure air bearing slider (e.g., 200 - see FIGS. 13a, 13b; see also appended Examiner's marked-up copy of FIG. 13b of Chhabra (US 5,831,791) at the end of this Office action) having a negative pressure cavity (C2), comprising: a body with a principal surface (PS) disposed to confront a recording surface of a recording medium, said principal surface (PS) having a lead portion (LP) and a rear portion (RP), said lead portion (LP) being spaced upstream from said rear portion relative to a rotational direction (RD) of any recording medium confronted by said slider (200), said lead portion (LP) having a front edge (FE), said rear portion (RP) having a rear edge (RE), said front edge (FE) and said rear edge (RE) together defining boundaries of said principal surface (PS) transverse to said front edge (FE) and said rear edge (RE) in a longitudinal direction (LD) of said slider body (200); and a U-shaped air bearing platform (including rails (204, 205, which collectively form the U-shaped air bearing platform) circumscribing a majority of said principal surface (PS) while defining a negative pressure cavity (C2) on said principal surface (PS), said U-shaped air bearing platform (204, 205) comprising not more than two separate air bearing platforms (e.g., each rail, 204 and 205, is considered a separate air bearing platform) each extending rearwardly toward said rear portion (RP) of said principal surface (PS) and respectively terminating at a first rear termination (233) and a second rear termination (233') to form trailing terminal ends of said negative pressure cavity spaced-apart from said rear portion (RP), at least one of said not more than two separate air bearing platforms (204, 205) including a sidewall contiguous with one of said boundaries (note that both 204 and 205 form a contiguous sidewall with slider edge at boundary); at least one of said first rear termination (233) and said second rear termination (233') not coinciding with said rear edge (RE), and being disposed upstream of said rear edge (RE) relative to said rotational direction (RD) of said recording medium."

Applicant's independent claim 21 however, defines, inter alia, "a U-shaped air bearing platform spaced-apart from said front edge, said U-shaped air bearing platform circumscribing a majority

of said principal surface while defining a negative pressure cavity on said principal surface..." while Chhabra '791 expressly teaches that "FIGS. 13a and 13b show a trirail NPAB slider in accordance with another embodiment of the invention where the first and second raised side rails 204, 205 extend from leading edge 200 to central regions 233, 233', respectively, and end before reaching trailing edge 2001 of the slider. This design reduces the risk of contact between first and second raised side rails 204, 205 and the disk, or "head crash". (This is because the most likely location of such contact is at the trailing edge of the rails, since this is the portion of the slider that is closest to the disk.)".1 There is therefore, no anticipation of claim 21.

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#### Claim 31

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In support of the rejection of independent claim 31, Paper No. 20080211 wrote,

"Additionally, as per claim 31, Chhabra (US 5,831,791) also discloses, the principal surface (PS) defining a first plane tangential to a first direction (FD) - i.e., the plane of the principal surface (PS) and the U-shaped air beating platform (204, 205) having a plurality of air beating surfaces (204, 205) embracing a majority of said principal surface (PS) while surrounding the negative pressure cavity (C2) and defining a second plane tangential to said first direction (FD) - i.e., the plane of the upper flat surfaces of (204, 205) spaced away from the principal surface (PS)), said U-shaped air bearing platform (204, 205) comprising not more than two separate air bearing platforms (204 and 205) each extending from said lead portion (LP) rearwardly toward said rear portion (RP) and respectively terminating at the first rear termination

Additionally, as per claim 31, Chhabra (US 5,831,791) also discloses ,the principal surface (PS) defining a first plane tangential to a first direction (FD) - i.e., the plane of the principal surface (PS) and the U-shaped air beating platform (204, 205) having a plurality of air beating surfaces (204, 205) embracing a

Chhabra '791, column 12, lines 43-52.

majority of said principal surface (PS) while surrounding the negative pressure cavity (C2) and defining a second plane tangential to said first direction (FD) - i.e., the plane of the upper flat surfaces of (204, 205) spaced away from the principal surface (PS)), said U-shaped air bearing platform (204, 205) comprising not more than two separate air bearing platforms (204 and 205) each extending from said lead portion (LP) rearwardly toward said rear portion (RP) and respectively terminating at the first rear termination (RP) of said principal surface (PS) and respectively forming a first air bearing surface (surface of 204) terminating in a first side wall portion (e.g., side wall portion of (204) at end of (204) and contiguous with side edge of slider body as seen in FIGS. 13a, 13b)) and forming a second air bearing surface (surface of (205)) terminating in a second side wall portion (e.g., side wall portion of (205) at end of (205) and contiguous with side edge of slider body as seen in FIGS. 13a, 13b)) at least one of said not more than two separate air bearing platforms including a sidewall (e.g., another portion of the side wall portion of (204 or 205) at end of (204 or 205) and contiguous with side edge of slider body as seen in FIGS. 13a, 13b)) extending from one of said boundaries, with said U-shaped platform (204, 205) comprising an arcuately shaped front wall (portion of rails (204) and (205) which extend toward each other) oriented toward said lead portion (LP), at least one of said not more than two separate air bearing platforms (204, 205) extending from an edge (side edge of slider body) of one of said boundaries."

Applicant's claim 31 however, defines among other features,

"at least one of said air bearing platforms being spacedapart from said front edge;

at least one of a surface between said first rear termination and said rear edge and a surface between said second rear termination and said rear edge being in said first plane."

Consequently, claim 31 is not anticipated by Chhabra '791. Withdrawal of this rejection and allowance of claim 31, is respectfully requested.

## Claim 42

In support of the rejection of independent claim 42, Paper No. 20080211 wrote,

"Additionally, as per claim 42, Chhabra (US 5,831,791) wherein [sic] the longitudinal direction (LD) of said slider (200) extends and forms a tangent to said rotational direction (RD), said U-shaped air bearing platform (204, 205) comprising not more than two separate air bearing platforms (204 and 205) each extending from said lead portion (LP) rearwardly toward said rear portion (RP) and respectively terminating at the first rear termination (RP) of said principal surface (PS) and respectively forming a first air bearing surface (surface of 204) terminating in a first side wall portion (e.g., side wall portion of (204) at end of (204) and contiguous with side edge of slider body as seen in FIGS. 13a, 13b)) and forming a second air bearing surface (surface of (205)) terminating in a second side wall portion (e.g., side wall portion of (205) at end of (205) and contiguous with side edge of slider body as seen in FIGS. 13a, 13b)) at least one of said not more than two separate air bearing platforms including a sidewall (e.g., another portion of the side wall portion of (204 or 205) at end of (204 or 205) and contiguous with side edge of slider body as seen in FIGS. 13a, 13b)) extending from one of said boundaries, with said U-shaped platform (204, 205) comprising an arcuately shaped front wall (portion of rails (204) and (205) which extend toward each other) oriented toward said lead portion (LP), at least one of said not more than two separate air bearing platforms (204, 205) extending from an edge (side edge of slider body) of one of said boundaries."

Applicant's claim 42 however, defines among other features,

"said U-shaped air bearing platform comprising not more than two separate air bearing platforms each extending from locations spaced-apart from said front edge and extending rearwardly toward said rear portion of said principal surface and respectively forming a first air bearing surface terminating in a first side wall portion and forming a second air bearing surface terminating in a second side wall portion"

Consequently, claim 42 is not anticipated by Chhabra '791. Withdrawal of this rejection and allowance of claim 42, is respectfully requested.

### Claim 52

In support of the rejection of independent claim 52, Paper No. 20080211 wrote,

"Additionally, as per claim 52, Chhabra (US 5,831,791) additionally discloses said principal surface (PS) having a lead portion (LP) separated from a rear portion (RP) by a central portion (CP), said lead portion (LP) and said central portion (CP) being spaced upstream from said rear portion (RP) relative to a rotational direction (RD) of any recording medium confronted by said slider, said lead portion (LP) having a front edge (FE), said rear portion (RP) having a rear edge (RE), said front edge (FE) and said rear edge (RE) connected together by longitudinal sides of said principal surface (PS) in a longitudinal direction (LD) of said slider body (200); and a plurality of arcuately shaped arms (204, 205) each having distal ends extending from opposite ones of said longitudinal sides curving inwardly across (see where (204, 205) curve inward and nearly meet at (C3)) said central portion (CP) of said principal surface (PS) with spaced-apart proximal, facing ends (at C3) of said arms (204, 205) together forming a U-shaped air bearing platform (204, 205) located between said longitudinal sides to separate a negative pressure cavity (C2) defined -by said arms (204, 205) on said principal surface (PS) from said longitudinal sides, at least one of said arms (204, 205) extending from an edge (side edge of slider) of one of said longitudinal sides: a distal end (233, 233') of at least one of said arms (204, 205) forming a terminal end wholly within said central portion (CP) and spaced-apart from said rear portion (RP).

Applicant's claim 52 however, defines among other features,

at least one of said arms having a proximal end spacedapart from said front edge;

a distal end of at least one of said arms forming a terminal end wholly within said central portion and spaced-apart from said rear portion.

Consequently, claim 52 is not anticipated by Chhabra '791. Withdrawal of this rejection and allowance of claim 52, is respectfully requested. Such action is respectfully urged.

#### Claim 55

In support of the rejection of independent claim 55, Paper No. 20080211 wrote,

"Additionally, as per claim 55, Chhabra (US 5,831,791) also discloses the plurality of arcuately shaped arms (204, 205) embracing a majority of said principal surface (PS) and each having distal ends extending from opposite ones of said longitudinal sides arcuately inwardly across said principal surface (PS) with spaced-apart proximal facing ends (at gap C3) of said arms (204, 205) together forming a U-shaped air bearing platform (204, 205) located between said longitudinal sides to separate a negative pressure cavity (C2) defined by said arms (204, 205) on said principal surface (PS) from said longitudinal sides; a distal end of at least one of said arms (204, 205) forming a terminal end wholly within said central portion (CP) and spaced apart from said rear portion (RP).

Applicant's claim 55 however, defines among other features,

at least one of said arcuately shaped arms closest to said front edge, being spaced-apart from said front edge;

a distal end of at least one of said arms forming a terminal end wholly within said central portion and spaced-apart from said rear portion.

Consequently, claim 55 is not anticipated by Chhabra '791. Withdrawal of this rejection and allowance of claim 55, is respectfully requested. Such action is respectfully urged.

#### Claim 58

In support of the rejection of independent claim 58, Paper No. 20080211 wrote,

Additionally, as per claim 58, said central portion (CP) being formed by opposite longitudinal sides separated by a longitudinal center (center area between rails (204, 205)) and bounded by said longitudinal edges (side of slider edges); and a plurality of arcuately shaped arms (204, 205) each having distal ends extending from opposite ones of said longitudinal sides curving inwardly across said central portion (CP) of said principal

surface (PS) with spaced-apart proximal facing ends of said arms together forming a U-shaped air bearing platform (204, 205) located between said longitudinal sides to separate a negative pressure cavity (at C2)) defined by said arms (204, 205) on said principal surface (PS) from said longitudinal sides (sides of the slider body (200)); at least one of said distal ends forming a terminal end (233, 233') wholly within said central portion (CP) and spaced-apart from said rear portion (RP)."

Applicant's claim 58 however, defines among other features,

said U-shaped air bearing platform being spaced-apart from said front edge:

at least one of said distal ends forming a terminal end wholly within said central portion and spaced-apart from said rear portion.

Consequently, claim 58 is not anticipated by Chhabra '791. Withdrawal of this rejection and allowance of claim 58, is respectfully requested. Such action is respectfully urged.

Claims 52-60 are rejected under 35 U.S.C. §102(e) as being anticipated by Crane et al. (US 5,721,650).

## Claim 52

In support of this rejection of independent claim 52, Paper No. 20080211 wrote,

As per claim 52, Crane et al. (US 5,721,650) discloses a negative pressure air bearing slider (FIG. 10A; see also appended Examiner's marked-up copy of FIG. 10A of Crane et al. (US 5,721,650) at the end of this Office action)) having a negative pressure cavity (100), comprising: a body with a principal surface disposed to confront a recording surface of a recording medium, said principal surface (PS) having a lead portion (LP) separated from a rear portion (RP) by a central portion (CP), said lead portion (LP) and said central portion (CP) being spaced upstream from said rear portion (RP) relative to a rotational direction of any recording medium confronted by said slider (70), said-lead portion (LP) having a front edge (FE), said rear portion (RP) having a rear edge (RE), said front edge (FE) and said rear edge (RE) connected together by longitudinal sides (sides of slider (70)) of said

principal surface in a longitudinal direction (LD) of said slider body (70); and a plurality of arcuately shaped arms (82, 84) each having distal ends extending from opposite ones of said longitudinal sides curving inwardly across said central portion (CP) of said principal surface (PS) with spaced-apart proximal facing ends (at 280 on each side - see FIG. 10A) of said arms (82,84) together forming a V-shaped air bearing platform (82,84) located between said longitudinal sides to separate a negative pressure cavity (at 100) defined by said arms (82, 84) on said principal surface (PS) from said longitudinal sides, at least one of said arms (82, 84) extending from an edge of one of said longitudinal sides; a distal end of at least one of said arms (82, 84) forming a terminal end (TE) wholly within said central portion (CP) and spaced-apart from said rear portion (RP).

As was previously noted in the foregoing paragraphs, Applicant's claim 52 defines among other features,

at least one of said arms having a proximal end spacedapart from said front edge;

a distal end of at least one of said arms forming a terminal end wholly within said central portion and spaced-apart from said rear portion.

Consequently, claim 52 is not anticipated by Crane '650. Withdrawal of this rejection and allowance of claim 52, is respectfully requested. Such action is respectfully urged.

#### Claim 55

In support of this rejection of independent claim 55, Paper No. 20080211 wrote,

"Additionally, as per claim 55, the plurality of arcuately shaped arms (82, 84) embracing a majority of said principal surface (PS); a distal end of at least one of said arms forming a terminal end wholly within said central portion and spaced-apart from said rear portion."

The foregoing paragraphs explain that Applicant's claim 55 define among other features,

at least one of said arcuately shaped arms closest to said

front edge, being spaced-apart from said front edge;

a distal end of at least one of said arms forming a terminal end wholly within said central portion and spaced-apart from said rear portion.

Consequently, claim 55 is not anticipated by Crane '650. Withdrawal of this rejection and allowance of claim 55, is respectfully requested. Such action is respectfully urged.

### Claim 58

In support of this rejection of independent claim 58, Paper No. 20080211 wrote,

Additionally, as per claim 58, said central portion (CP) being formed by opposite longitudinal sides separated by a longitudinal center and bounded by said longitudinal edges.

Applicant's claim 58 however, defines among other features,

said U-shaped air bearing platform being spaced-apart from said front edge:

at least one of said distal ends forming a terminal end wholly within said central portion and spaced-apart from said rear portion.

Consequently, claim 58 is not anticipated by Crane '650. Withdrawal of this rejection and allowance of claim 58, is respectfully requested. Such action is respectfully urged.

# Allowable Subject Matter

The Examiner's indication of the allowability of dependent claims 24, 27-29, 35, 38-40, 45, 48-50 is noted with appreciation.

No fee is incurred by this Amendment.

Respectfully submitted

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